UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,438	09/22/2005	Shinichi Yamamoto	49288.0900	4301

20322 7590 09/17/2009

SNELL & WILMER L.L.P. (Main)
400 EAST VAN BUREN
ONE ARIZONA CENTER
PHOENIX, AZ 85004-2202

EXAMINER	
VILLENA, MARK	

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
09/17/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/528,438	YAMAMOTO ET AL.	
	Examiner	Art Unit	
	MARK VILLENA	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/18/2005 and 05/09/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings submitted on 03/18/2005. These drawings are reviewed and accepted by the examiner.

Priority

2. Receipt is acknowledged or paper submitted under 35 U.S.C. 119(a)-(d), which papers have been places of record in the file.

Information Disclosure Statement

3. The information disclosure statements (IDS) submitted on 03/18/2005 and 05/09/2008 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Interactive Device for Detecting Health Condition of a User.

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The abstract of the disclosure is objected to because legal phraseology should not be used, i.e., "Detection *means* 50b..." Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 1-9, and 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yuschik (US 2003/00466088 A1)** in view of **Nagisa et al. (US 2001/0037193 A1)**.

Regarding **claim 1**, **Yuschik** discloses *"An interactive apparatus"*, comprising:

"deciding means for deciding on an action pattern in accordance with the health condition of the user detected by the detection means" (in **FIG. 8, item 815, and par. [0016]**; decision is made as to what command (action pattern) to execute 850 depending on the user's spoken response);

"execution instructing means for instructing execution of the action pattern decided by the deciding means" (in **FIG. 8, item 850**; execution of command (action pattern);

"offering means for making an offer of the action pattern to the user with a speech before instructing execution of the action pattern decided by the deciding means" (in **FIG. 7A and par. [0121]**; a prompt (offering of action pattern) grammar template that begins with a short spoken (speech) Introductory Label 710 (prior to execution of action, or command), such as a menu name.);

"and determination means for determining whether an answer of the user to the offered action pattern is an answer to accept the offered action pattern or not" (in **FIG. 9, item 925**; determines is the response to the prompt is "yes" (accept) or no");

wherein the execution instructing means instructs execution of the offered action pattern when the answer of the user is determined to be the answer to accept the offered action pattern (in **FIG. 9, item 940**; if the response is "yes" (accept), then the command (action pattern) is executed).

Yuschik does not expressly disclose *"detection means for detecting a health condition of a user."*

Nagisa discloses *"detection means for detecting a health condition of a user"* (in **FIG. 1, item 21 and par. [0037]**; keywords are extracted from the input and the user's feelings (which may depend on health conditions) are interpreted).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify **Yuschik's** invention by employing the teaching as taught by **Nagisa** to provide the technology of determining the user's feelings through extracting keywords via input.

Based on above teachings, one ordinarily skilled in the art would recognize that the combination would provide a feeling generation apparatus capable of determining a user's condition based on keywords and involve using known technology (evaluating user's feelings by interpreting keywords) to improve similar device (voice activated user interface (VA UI) that uses voice recognition and voice prompts) in the same way (VA UI that evaluates keywords corresponding to a user's feelings and provides prompts (action patterns) accordingly) [See par. 0017]. The result would be predictable.

Regarding **claim 2**, **Yuschik** discloses *"the detection means detects the health condition of the user based on utterance of the user"* (in **FIG. 1, item 12, and par. [0046]**; user provides input by speaking (uttering) through the microphone).

Regarding **claim 3**, **Yuschik** discloses *"detection means detects the health condition of the user based on keywords uttered by the user"* (in **par. [0067]**; "word" means a word or phrase (keyword) that is spoken to indicate an integral task concept.).

Regarding **claim 4**, **Yuschik** discloses *"offer necessity determination means for determining whether it is required to make an offer of the action pattern to the user*

before instructing execution of the action pattern decided by the deciding means" and *"wherein the offering means makes an offer of the action pattern to the user with a speech when it is determined that making an offer of the action pattern to the user is required before instructing execution of the action pattern"* (in **FIG. 9 and par. [0134]**; a prompt (offer of the action pattern) is determined necessary when the user failed to provide a suitable response for the initial prompt. Once that is determined, a prompt (offer of action pattern) with speech is provided to the user.).

Regarding **claim 5**, **Yuschik** discloses *"the offer necessity determination means determines necessity of making an offer in accordance with a value of a flag indicating a necessity of making an offer which is previously allocated to the action pattern"* (in **FIG. 9 and par. [0134]**; a prompt (offer of the action pattern) is determined necessary when the user failed to provide a suitable response for the initial prompt. Once that is determined, a prompt (offer of action pattern) with speech is provided to the user. Inherently, there must be a flag, or signal of some sort, signifying the necessity of the prompt in order to perform the above method.).

Regarding **claim 6**, **Yuschik** discloses *"the offer necessity determination means determines necessity of making an offer based on time distribution of the number of times the action pattern is performed"* (in **par. [0020]**; optimizing the voice activated user interface with a database of command words including at least one word indicating a task (action pattern) and selected from plural words based on frequency of use (number of times the action is performed).).

Regarding **claim 7**, **Yuschik** discloses *"the deciding means decides one of a plurality of action patterns to which priorities are respectively allocated as an action pattern in accordance with the health condition of the user, and changes the priority allocated to the action pattern in accordance with whether or not the action pattern is accepted by the user"* (in **par. [0123]**; 'A first prompting chunk 720 begins with a short carrier phrase (e.g., "You may say . . . ," or "Say . . . ,"), then a first group of response options Chunk1 is spoken by the service. It is preferred that the group of choices for Chunk1 includes the rank-ordered (priority), most frequently used commands for the current menu.' Group of action patterns are prioritized based on frequently used commands. Inherently, the action patterns can be prioritized according to commands influenced by the user's health conditions. Since action patterns are prioritized based on how often they are used, then the action patterns not accepted by the user will undergo a change priority.).

Regarding **claim 8**, **Yuschik** discloses *"storage means for storing the action pattern in accordance with the health condition of the user, wherein the deciding means decides on the action pattern by using the action pattern stored in the storage means"* (in **FIG. 1, item 6**; command (action pattern) vocabulary storage means which stores the command words.).

Regarding **claim 9**, **Yuschik** discloses *"the action pattern offered by the offering means to the user includes selecting contents to be reproduced by a reproducing device"* (in **FIG. 1, item 16 and in par. [0046]**; information maybe be output (reproduced) through a sound generating device such as a loudspeaker 16).

Regarding **claim 12**, **Yuschik** does not expressly disclose *"the health condition of the user represents at least one of feelings of the user and a physical condition of the user."*

Nagisa discloses *"the health condition of the user represents at least one of feelings of the user and a physical condition of the user"* (in **FIG. 1, item 21 and par. [0037]**; keywords are extracted from the input and the user's feelings (which may depend on health conditions) are interpreted).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify **Yuschik's** invention by employing the teaching as taught by **Nagisa** to provide the technology of determining the user's feelings through extracting keywords via input.

Based on above teachings, one ordinarily skilled in the art would recognize that the combination would provide a feeling generation apparatus capable of determining a user's condition based on keywords and involve using known technology (evaluating user's feelings by interpreting keywords) to improve similar device (voice activated user interface (VA UI) that uses voice recognition and voice prompts) in the same way (VA UI that evaluates keywords corresponding to a user's feelings and provides prompts (action patterns) accordingly) [See par. 0017]. The result would be predictable.

Regarding **claim 13**, **Yuschik** discloses *"An interactive apparatus"* comprising:

"a voice input section for converting a voice produced by the user into a voice signal" (in **FIG. 1, item 12**; microphone for voice input);

"a voice recognition section for recognizing words uttered by the user based on the voice signal output from the voice input section" (in **FIG. 8, item 815**; step 815 attempts to recognize whether a command (keyword) was uttered by the user. Inherently, this is a voice recognition section.);

"a conversation database in which words expected to be uttered by the user are previously registered" (in **FIG. 1, item 6**; command vocabulary storage stores words for voice activated user interface (VA UI) dialogues.);

"detection means for detecting the health condition of the user by checking the words recognized by the voice recognition section against the words registered in the conversation database and deciding on the health condition of the user in accordance with the checking result" (in **par. [0016]**; 'The processor interprets a spoken response based on the stored command words.' The words recognized from the user are checked against the stored vocabulary words to see if a keyword was spoken.);

"deciding means for deciding on an action pattern in accordance with the health condition of the user detected by the detection means based on an action pattern table storing correspondences between the health condition of the user and action patterns of the interactive apparatus" (in **FIG. 8, item 815, and par. [0016]**; decision is made as to what command (action pattern) to execute 850 depending on the user's spoken response);

"execution instructing means for instructing execution of the action pattern decided by the deciding means" (in **FIG. 8, item 850**; execution of command (action pattern);

"offering means for synthesizing an offering sentence based on an output result of the detection means and an output result of the deciding means and making an offer of the action pattern to tile user with a speech before instructing execution of the action pattern decided by the deciding means" (in **FIG. 1, item 14 and par. [0046]**; the speaker 14 outputs the offering sentence (which is synthesized) to the user) and (in **FIG. 7A and par. [0121]**; 'A prompt (offering of action pattern) grammar template that begins with a short spoken Introductory Label 710 (a speech prior to execution of action, or command), such as a menu name.');

"and determination means for determining whether an answer of the user to the offered action pattern is an answer to accept the offered action pattern or not" (in **FIG. 9, item 925**; determines is the response to the prompt is "yes" (accept) or no");

"wherein the execution instructing means instructs execution of the offered action pattern when the answer of the user is determined to be the answer to accept the offered action pattern" (in **FIG. 9, item 940**; if the response is "yes" (accept), then the command (action pattern) is executed).

Yuschik does not expressly disclose *"and which stores correspondences between the registered words and the health condition of the user."*

Nagisa discloses *"and which stores correspondences between the registered words and the health condition of the user"* (in **FIG. 1, item 21 and par. [0037]**; keywords are extracted from the input and the user's feelings (which may depend on health conditions) are interpreted via the keywords).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify **Yuschik's** invention by employing the teaching as taught by **Nagisa** to provide the technology of determining the user's feelings corresponding to extracted keywords via input.

Based on above teachings, one ordinarily skilled in the art would recognize that the combination would provide a feeling generation apparatus capable of determining a user's condition based on keywords and involve using known technology (evaluating user's feelings by interpreting keywords) to improve similar device (voice activated user interface (VA UI) that uses voice recognition and voice prompts) in the same way (VA UI that evaluates keywords corresponding to a user's feelings and provides prompts (action patterns) accordingly) [See par. 0017]. The result would be predictable.

Regarding **claim 14**, **Yuschik** discloses:

"means for receiving an action pattern which is counter-offered by the user with respect to the offered action pattern" (in **FIG. 9 and par. [0134]**; 'entering a secondary prompt grammar (offering for action pattern), which occurs when prompting by the primary grammar fails to elicit a suitable response.' 'Failing to elicit a suitable response' could be a user's counter-offer to the prompt.);

"means for the interactive apparatus to determine whether the counter-offered action pattern is executable or not" (in **FIG. 9 and par. [0134]**; 'entering a secondary prompt grammar (offering for action pattern), which occurs when prompting by the primary grammar fails to elicit a suitable response.' Inherently, there's a determining means for whether a response (counter-offer) is suitable (executable).);

"and means for updating the correspondences between the health condition of the user and the action patterns of the interactive apparatus which are stored in the action pattern table when the interactive apparatus determines that the counter-offered action pattern is executable" (in **FIG. 4**; disclosed are submenus, menus in which are presented (updated) after a certain response from the user is identified as executable. Inherently, such response could be a counter-offer. Such method reads on 'updating the action pattern table (i.e., submenus) when a counter-offer is executable.').

10. **Claims 10 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yuschik** in view of **Nagisa**, and further in view of **Shimomura et al. (US 2001/0021909 A1)**.

Regarding **claim 10**, **Yuschik** (in view of Nagisa) does not expressly disclose *"wherein the contents include audio data, video data, and lighting control data, and the reproducing device changes at least one of light intensity and color of light of a lighting apparatus based on the lighting control data."*

Shimomura discloses *"wherein the contents include audio data, video data, and lighting control data, and the reproducing device changes at least one of light intensity and color of light of a lighting apparatus based on the lighting control data"* (in **FIG. 1, items 15 and 16, FIG. 3, item 31B, and par. [0054]**; the unit consists of a microphone 15 (audio data) and camera 16 (video data). Since the system comprises an image recognition unit 31B, inherently lighting data is taken of objects in view of the camera. Cameras require the change of light exposure, depending on the amount of light

present for video or image capture. Therefore, 'changing the light intensity based on lighting control data' is inherent.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify **Yuschik's** invention by employing the teaching as taught by **Shimomura** to provide a means of reproducing audio, video, and lighting data.

Based on above teachings, one ordinarily skilled in the art would recognize that the combination would involve using known technology (Shimomura's voice interactive robot with audio, video, and lighting data reproduction capabilities) to improve similar devices (Yuschik's system for voice actuated services and Nagisa's method of determining a user's feelings by extracting keywords via voice recognition) in the similar way (system that can detect health conditions via voice recognition with audio, video, and lighting data reproduction capabilities). The result would be predictable.

Regarding **claim 11, Yuschik** (in view of Nagisa) does not expressly disclose *"wherein the interactive device has at least one of an agent function and a traveling function."*

Shimomura discloses *"wherein the interactive device has at least one of an agent function and a traveling function"* (in **FIG. 1, items 3A and 3B**; the legs of the robot 3A enable the device to travel and move about).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify **Yuschik's** invention by employing the

teaching as taught by **Shimomura** to provide mobility functions (traveling functions) via legs of the robot.

Based on above teachings, one ordinarily skilled in the art would recognize that the combination would involve using known technology (Shimomura's voice interactive robot with mobility functions) to improve similar devices (Yuschik's system for voice actuated services and Nagisa's method of determining a user's feelings by extracting keywords via voice recognition) in the similar way (system that can detect health conditions via voice recognition with mobility functions). The result would be predictable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK VILLENA whose telephone number is (571) 270-3191. The examiner can normally be reached on M - Th 7:30 - 5, F 7:30 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MARK VILLENA
Examiner
Art Unit 2626

/QI HAN/
Primary Examiner, Art Unit 2626